IN THE CLAIMS

Please cancel claim 7 and 50, and amend claims 1, 5-7, 10, 11, 18-20, 23, 25, 32-35, 40, 41, 44, 45, 49, 50, 52, 55, 56, 58, 60, 62, 63, 65 and 68 as follows:

1. (Currently Amended) A method for inspection of a roll of web material through a web inspection system comprising:

inspecting a roll of web material to determine a ~~the~~ number, type and location of one or more detectable defects along the web material;

outputting an electronic data representation of a ~~the~~ roll map, including real-time visual images of the one or more detectable defects;

storing the electronic data representation to enable subsequent retrieval thereof;

performing a Self-Diagnostic Test on said web inspection system to determine the performance of the web inspection by the web inspection system, including:

measuring or retrieving actual certification data applied during said inspection; and

comparing the ~~applied~~ actual certification data to standardized certification data to determine whether the ~~applied~~ actual certification data was within a ~~the~~ predetermined range of tolerances;

performing a System Integrity Test measuring performance and calibration of predetermined components of the web inspection system; and

certifying an ~~the~~ accuracy of the roll map electronic data representation of the inspected web material to be within a predetermined range of tolerances set for that web material.

Claims 2-4. (Canceled).

5. (Currently Amended) The method according to claim 1 wherein,

said performing a ~~s~~Self-~~d~~Diagnostic test further includes performing a Product Calibration Test measuring or reviewing an application of product set-up parameters for the particular web material inspected.

6. (Currently Amended) The method according to claim 1 wherein,

said actual certification data includes System Integrity Test Data relating to a ~~the~~ calibration and operation of predetermined components of the web inspection system, and Product Calibration Test Data reviewing product set-up parameters applied for the particular web material inspected.

Claim 7. (Canceled).

8. (Previously Presented) The method according to claim 1 wherein,

said certifying includes generating a digital Product Inspection Certificate containing and certifying the data representation of the roll map.

9. (Original) The method according to claim 8, wherein

said certifying further includes generating a digital signature with the Product Inspection Certificate.

10. (Currently Amended) A method for certifying an inspection of a roll of web material through a web inspection system comprising:

calibrating the web inspection system to conform to predetermined certification data for the roll of web material to be inspected;

inspecting the roll of a web material for one or more defects, if any, through the web inspection system;

detecting at least one of the one or more defects through the web inspection system, including real-time visual images of the at least one or more detectable defects;

determining a ~~the~~ location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material;

recording the detection of the at least one or more detected defects, their real-time visual images thereof, and their location relative the roll of web material on an electronic recording medium to create an electronic roll map;

measuring actual certification data of the web inspection system;

comparing the actual certification data to the predetermined certification data for the roll of web material;

certifying an ~~the~~ accuracy of the roll map of the inspected web material when the actual certification data is within a predetermined tolerance of the predetermined certification data; and

re-inspecting the roll of web material through the same web inspection system or an independent second web inspection system to verify the certification by detecting the at least one of the one or more defects, through the web inspection system.

11. (Currently Amended) The method according to claim 10 wherein,

said actual certification data includes System Integrity Test Data of predetermined components of the web inspection system, and

said measuring includes performing a self diagnostic test on said predetermined components to generate the actual certification data.

12. (Original) The method according to claim 11 wherein,

said performing a Self-Diagnostic Test is performed periodically within a predetermined time interval.

13. (Original) The method according to claim 12, further including:

time stamping the performance of the Self-Diagnostic Test.

14. (Original) The method according to claim 11 wherein,

said performing a Self-Diagnostic Test is performed before each web inspection run.

15. (Previously Presented) The method according to claim 11 wherein,

said predetermined components include vision hardware of the web inspection system.

16. (Previously Presented) The method according to claim 15 wherein,

said vision hardware includes at least one of a camera, a lens and a light source.

17. (Previously Presented) The method according to claim 16 wherein,

said System Integrity Test Data includes at least one of camera alignment, lens focus and light source alignment.

18. (Currently Amended) The method according to claim 10 wherein,

said actual certification data further includes Product Calibration Data corresponding to the particular web material being inspected, and

said measuring includes determining what inspection set-up parameters were employed during the web inspection, and determining that the inspection set-up parameters ~~they~~ have not been altered.

19. (Currently Amended) The method according to claim 18 wherein,

said system inspection set-up parameters include a desired level of flaw detection.

20. (Currently Amended) The method according to claim 18 further including:

providing said inspection set-up parameters by a customer.

21. (Previously Presented) The method according to claim 10, further including:

time stamping a current measuring of the actual certification data.

22. (Original) The method according to claim 10, wherein

said certifying includes generating a Product Inspection Certificate including the actual certification data, the predetermined certification data, and the roll map.

23. (Currently Amended) The method according to claim 10, wherein

said certifying further includes generating a digital signature with a ~~the~~ certification report.

24. (Previously Presented) The method according to claim 10, further including:

determining a cause of the at least one detected defect.

25. (Currently Amended) The method according to claim 24, wherein

said determining the cause includes comparing a ~~the~~ measured defect data of the at least one detected defect with existing defect data of a process-control database.

Claim 26. (Canceled).

27. (Previously Presented) The method according to claim 10 , wherein

said re-inspecting the roll further includes:

determining the location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material;

recording the detection of the at least one detected defect, and its location relative the roll of web material on a recording medium to create a roll map;

measuring actual certification data of the web inspection system;

comparing the measured actual certification data to the predetermined certification data for the roll of web material; and

recertifying the accuracy of the second roll map of the inspected web material when the secondly measured actual certification data is within the predetermined tolerance of the predetermined certification data.

28. (Original) The method according to claim 27, wherein

said fiduciary indicators are provided by placing fiduciary marks along said roll of web material.

29. (Original) The method according to claim 28, wherein

said placing fiduciary marks is performed during the first indicated inspection of said roll of web material.

30. (Original) The method according to claim 29, wherein

said fiduciary marks are placed along an edge of the web material.

31. (Previously Presented) The method according to claim 10, wherein

said re-inspection is performed on the roll of web material in an opposite direction of the first indicated web inspection.

32. (Currently Amended) The method according to claim 10, further including:

verifying a location of the at least one or more defects by comparing a ~~the~~ determined ~~the~~ location ~~of the at least one detected defect~~, relative to the roll of web material and~~,~~ relative to the fiduciary indicators ~~of the first inspection~~ to the placed along the web material during the first inspection, of the at least one detected defect to the determined ~~the~~ location ~~of the at least one detected defect~~, relative to the roll of web material~~,~~ and relative to the fiduciary indicators to be placed during the re-inspection thereof, of the at least one detected defect.

33. (Currently Amended) The method according to claim 10, further including:

determining said fiduciary indicators by the detection of the at least one or more defects along said roll of web material.

34. (Currently Amended) A web inspection certification system to certify an inspection a roll of web material through a web inspection system comprising:

a web inspection system adapted to inspect a roll of web material applying certification data relating to the web inspection system and the particular web material to detect at least one or more defects, if any, therein, their type, their location relative the web material, and their real-time visual image thereof, said inspection system generating an electronic data representation of a ~~the~~ roll map;

a recording device configured to record the electronic data representation for subsequent retrieval thereof;

a diagnostic device adapted to measure or retrieve actual certification data of the web inspection system applied or to be applied during said web inspection corresponding to the particular web material being inspected;

a certifying device adapted to certify an ~~the~~ accuracy of the electronic data representation of ~~a~~ the roll map of the inspected web material when the ~~applied~~ actual certification data conforms, within a predetermined tolerance, to standardized certification data for the roll of web material; and

a time stamp device to time stamp the occurrence of a Self-Diagnostic Test performed by the diagnostic device.

35. (Currently Amended) The system according to claim 34 wherein,

said ~~applied~~ actual certification data includes System Integrity Test Data of predetermined components of the web inspection system.

36. (Previously Presented) The system according to claim 35 wherein,

said predetermined components include vision hardware of the web inspection system.

37. (Previously Presented) The system according to claim 36 wherein,

said vision hardware includes at least one of a camera, a lens and a light source.

38. (Previously Presented) The system according to claim 37 wherein,

said System Integrity Test Data includes at least one of camera alignment, lens focus and light source alignment.

Claim 39. (Canceled).

40. (Currently Amended) The system according to claim 35 wherein,

said actual certification data further includes Product Calibration Data corresponding to the particular web material being inspected to certify which product set-up parameters were employed during the web inspection, and that the product set-up parameters ~~they~~ have not been altered.

41. (Currently Amended) The system according to claim 40 wherein,

said ~~system inspection~~ product set-up parameters include a desired level of flaw detection.

42. (Currently Amended) The system according to claim 34, wherein

said certifying device is configured to generate a Product Inspection Certificate including the actual certification data, predetermined certification data, and the roll map.

43. (Original) The system according to claim 42, wherein

said certifying device is further adapted to generate a digital signature with the Product Inspection Certificate.

44. (Currently Amended) The system according to claim 34, further including:

a defect analysis device configured to determine a cause of a detected defect by comparing a ~~the~~ measured defect data of the at least one detected defect with existing defect data of a process-control database.

45. (Currently Amended) The system according to claim 34, further including:

a location analysis device configured to determine a ~~the~~ location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material.

46. (Original) The system according to claim 45, wherein

said fiduciary indicators include spaced-apart fiduciary marks placed along said roll of web material.

47. (Original) The system according to claim 46, wherein

said fiduciary marks are spaced-apart along an edge of the web material.

48. (Original) The system according to claim 45, wherein:

said fiduciary indicators include the detected one or more defects relative their placement along said roll of web material.

49. (Currently Amended) A method for inspection of a roll of web material through a web inspection system comprising:

inspecting a roll of web material to determine a ~~the~~ number, type and location of one or more detectable defects along the web material;

outputting an electronic data representation of the roll map, including real-time visual images of the one or more detectable defects;

storing the electronic data representation to enable subsequent retrieval thereof;

performing a Self-Diagnostic Test on said inspection system to determine the performance of the web inspection by the inspection system, including:

measuring or retrieving actual certification data applied during said inspection; and

comparing the ~~applied~~ actual certification data to standardized certification data to determine whether the ~~applied~~ actual certification data was within a ~~the~~ predetermined range of tolerances, said actual certification data includes System Integrity Test Data relating to the calibration and operation of predetermined components of the web inspection system, and Product Calibration Test Data reviewing product set-up parameters applied for the particular web material inspected; and

certifying an ~~the~~ accuracy of the roll map ~~object~~ electronic data representation of the inspected web material to be within a predetermined range of tolerances set for that web material.

Claim 50. (Canceled).

51. (Previously Presented) The method according to claim 49 wherein,

said certifying includes generating a digital Product Inspection Certificate containing and certifying the data representation of the roll map.

52. (Currently Amended) A method for certifying an inspection of a roll of web material through a web inspection system comprising:

calibrating the web inspection system to conform to predetermined certification data for the roll of web material to be inspected;

inspecting the roll of a web material for one or more defects, if any, through the web inspection system;

detecting at least one of the one or more defects through the web inspection system, including real-time visual images of the at least one or more detectable defects;

determining a ~~the~~ location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material;

recording the detection of the at least one or more detected defects, their real-time visual images thereof, and their location relative the roll of web material on an electronic recording medium to create an electronic roll map;

measuring actual certification data of the web inspection system, which includes performing a Self-Diagnostic Test on vision hardware of the web inspection system, said

actual certification data includes System Integrity Test Data of said vision hardware including at least one of camera alignment of a camera, lens focus of a lens, and light source alignment of a light source;

comparing the actual certification data to the predetermined certification data for the roll of web material; and

certifying an ~~the~~ accuracy of the roll map of the inspected web material when the actual certification data is within a predetermined tolerance of the predetermined certification data.

53. (Previously Presented) The method according to claim 52 wherein,

said performing a Self-Diagnostic Test is performed periodically within a predetermined time interval.

54. (Previously Presented) The method according to claim 52, further including:

time stamping the occurrence of the Self-Diagnostic Test.

55. (Currently Amended) A method for certifying an inspection of a roll of web material through a web inspection system comprising:

calibrating the web inspection system to conform to predetermined certification data for the roll of web material to be inspected;

inspecting the roll of a web material for one or more defects, if any, through the web inspection system;

detecting at least one of the one or more defects through the web inspection system, including real-time visual images of the at least one or more detectable defects;

determining a ~~the~~ location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material;

recording the detection of the at least one detected defect, and its location relative the roll of web material on a recording medium to create a roll map;

recording the detection of the at least one or more detected defects, their real-time visual images thereof, and ~~its~~ their location relative the roll of web material on an electronic recording medium to create an electronic roll map;

measuring actual certification data of the web inspection system and performing a Self-Diagnostic Test on predetermined components of the web inspection system to generate the actual certification data within a predetermined time interval;

time stamping the occurrence of the Self-Diagnostic Test;

comparing the actual certification data to the predetermined certification data for the roll of web material; and

certifying an ~~the~~ accuracy of the roll map of the inspected web material when the actual certification data is within a predetermined tolerance of the predetermined certification data.

56. (Currently Amended) The method according to claim 55 wherein,

said actual certification data includes System Integrity Test Data of at least one of a camera, a lens and a light source of the predetermined components.

57. (Previously Presented) The method according to claim 56 wherein,

said System Integrity Test Data includes at least one of camera alignment, lens focus and light source alignment.

58. (Currently Amended) A web inspection certification system to certify an inspection a roll of web material through a web inspection system comprising:

a web inspection system adapted to inspect a roll of web material applying certification data relating to the web inspection system and the particular web material to detect at least one or more defects, if any, therein, their type, their location relative the web material, and their real-time visual image thereof, said inspection system generating an electronic data representation of a ~~the~~ roll map;

a recording device configured to record the electronic data representation for subsequent retrieval thereof;

a diagnostic device adapted to measure or retrieve actual certification data of the web inspection system applied or to be applied during said web inspection corresponding to the particular web material being inspected, said ~~applied~~ actual certification data includes System Integrity Test Data including at least one of camera alignment of a camera, lens focus of a lens, and light source alignment of a light source of the web inspection system; and

a certifying device adapted to certify an ~~the~~ accuracy of the electronic data representation of ~~a~~ the roll map of the inspected web material when the ~~applied~~ actual certification data conforms, within a predetermined tolerance, to standardized certification data for the roll of web material.

59. (Previously Presented) The system according to claim 58, wherein

said certifying device is configured to generate a Product Inspection Certificate including the actual certification data, predetermined certification data, and the roll map.

60. (Currently Amended) The system according to claim 58, further including

a defect analysis device configured to determine a cause of a detected defect by comparing a ~~the~~ measured defect data of the at least one detected defect with existing defect data of a process-control database.

61. (Previously Presented) The system according to claim 58, further including

a time stamp device to time stamp the occurrence of a Self-Diagnostic Test performed by the diagnostic device.

62. (Currently Amended) A web inspection certification system to certify an inspection a roll of web material through a web inspection system comprising:

a web inspection system adapted to inspect a roll of web material applying certification data relating to the web inspection system and the particular web material to detect at least one or more defects, if any, therein, their type, their location relative the web material, and their real-time visual image thereof, said inspection system generating an electronic data representation of a ~~the~~ roll map;

a recording device configured to record the electronic data representation for subsequent retrieval thereof;

a diagnostic device adapted to measure or retrieve actual certification data of the web inspection system applied or to be applied during said web inspection corresponding to the particular web material being inspected, said ~~applied~~ actual certification data includes System Integrity Test Data of predetermined components of the web inspection system, and Product Calibration Data corresponding to the particular web material being inspected to certify which product set-up parameters were employed during the web inspection, and that the product set-up parameters ~~they~~ have not been altered; and

a certifying device adapted to certify an ~~the~~ accuracy of the electronic data representation of ~~a~~ the roll map of the inspected web material when the ~~applied~~ actual certification data conforms, within a predetermined tolerance, to standardized certification data for the roll of web material.

63. (Currently Amended) The system according to claim 62, further including

a defect analysis device configured to determine a cause of a detected defect by comparing a ~~the~~ measured defect data of the at least one detected defect with existing defect data of a process-control database.

64. (Previously Presented) The system according to claim 62, further including:

a time stamp device to time stamp the occurrence of a Self-Diagnostic Test performed by the diagnostic device.

65. (Currently Amended) A web inspection certification system to certify an inspection a roll of web material through a web inspection system comprising:

a web inspection system adapted to inspect a roll of web material applying certification data relating to the web inspection system and the particular web material to detect at least one or more defects, if any, therein, their type, and their real-time visual image thereof, said inspection system generating an electronic data representation of a ~~the~~ roll map;

a diagnostic device adapted to measure or retrieve actual certification data of the web inspection system applied or to be applied during said web inspection corresponding to the particular web material being inspected;

a certifying device adapted to certify an ~~the~~ accuracy of the electronic data representation of the ~~a~~ roll map of the inspected web material when the ~~applied~~ actual

certification data conforms, within a predetermined tolerance, to standardized certification data for the roll of web material;

a location analysis device configured to determine a ~~the~~ location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material; and

a recording device configured to record the detection of the at least one detected defect, and its location relative the roll of web material to create the roll map thereof;

wherein said fiduciary indicators include the detected at least one or more defects themselves relative their placement along said roll of web material.

66. (Canceled)

67. (Previously Presented) The system according to claim 65, further including:

a time stamp device to time stamp the occurrence of a Self-Diagnostic Test performed by the diagnostic device.

68. (Currently Amended) A method for certifying an inspection of a roll of web material through a web inspection system comprising:

inspecting the roll of a web material for one or more defects, if any, through the web inspection system;

detecting at least one of the one or more defects through the web inspection system;

determining a ~~the~~ location of the at least one detected defect, relative the roll of web material, through fiduciary indicators placed along the web material;

recording the detection of the at least one detected defect, and its location relative the roll of web material on a recording medium to create a roll map; and

re-inspecting the roll of web material through the same web inspection system or an independent second web inspection system, in an opposite direction of the first indicated web inspection, to verify a ~~the~~ certification by detecting the at least one of the one or more defects, through the web inspection system.